

## ABSTRACT

Described herein is a method for parallel generating Walsh-Hadamard (WH) channelization codes and Orthogonal Variable Spreading Factor (OVSF) channelization codes, which are channelization codes formed by a plurality of strings of antipodal digits, each having a given length  $L$  and being identifiable by respective indices  $I$  formed by strings of binary digits, each having a given length  $N$  equal to the logarithm in base two of the length  $L$  of the channelization codes, the antipodal digits of the channelization codes assuming the values  $+1$  and  $-1$  and the binary digits of said indices  $I$  assuming the values  $0$  and  $1$ . The method according to the invention enables determination of the antipodal digits of the channelization codes according to the binary digits of the corresponding indices  $I$ , implementing specific EXOR logic operations, by means of which there are first generated intermediate binary digits, which are then encoded with the antipodal digits of the channelization codes using an encoding criterion according to which the intermediate binary digits  $0$  and  $1$  can be encoded, respectively, with the antipodal digits  $-1$  and  $+1$  or else with the antipodal digits  $+1$  and  $-1$  according to the type of binary encoding chosen *a priori* for the antipodal digits themselves.

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